File No. 1001

1935.

Collection No.

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Pros. Serial Nos.

Subject.

Grant to the Govt. of Mysore from the Reserve in the Road Account for. experiments on Road surfacing Painting.

Previous References.

J.273(2) of 1931.

Later References.

11 32
36

CORRESPONDENCE.

No. 162/S S.N.I.

Encls: 5 Encls
1 Abstract
1 Data

PUBLIC WORKS SECRETARIAT.

Dated Bangalore, 19th July 1935.

FROM

OFFICE OF THE RESIDENT IN MYSORE.
BANGALORE.
27 JUL 1935
Regd. No. 7210
File No.

The Secretary to Government,
Public Works Department,
Bangalore.

To

The Secretary to the Hon'ble the Resident in Mysore,
Bangalore.

Subject:- Grant for experiments on various methods of road construction and maintenance.

SIR,

At the Road Conference held at Simla during 1931, it was agreed that grants be allotted from the reserve held by the Government of India out of the Petrol Tax Revenue, for experimenting with various kinds of road construction and maintenance. I am directed to inform you that His Highness Government propose to try the following methods of road treatment on the Bangalore-Mysore road in the Mysore State for experimental purposes:-

(1) One mile of ordinary tar painting on water bound macadam, estimated cost Rs 2,000. Tar painting has really passed beyond the experimental stage particularly in the Punjab, but has not been tried out in Southern India to anything like the same extent and is very little known. Tar is, of course, manufactured in India and its use should be encouraged. This will form a useful demonstration for Southern India.

(2) Half a mile of laterite road treated with a light coat of granite metal rolled into the laterite and painted with tar, estimated cost Rs 4,000. This is a specification which may be tried in Southern India and in the Deccan where there is an extensive mileage of laterite roads.

(3) One mile of granite trackways laid in water bound road and surface painted with bitumen, estimated cost Rs 14,000. This is expensive but will probably be very durable. Some small scale experiments already carried out tend to show that on a metalled road the addition of trackways made of local granite slab about 18 inches to 2 ft. wide and surface painted with bitumen, laid in the tracks where the bullock cart naturally cuts ruts, will carry both the bullock cart and motor traffic without appreciable wear. This has been tried on an approach road to Bangalore on a small scale where bullock cart

P.T.O

traffic is heavy and it is now desired to try it on a larger scale on the main road.

(4) Quarter mile of premixed bituminous macadam trackways in water bound macadam. The whole surface is to be painted as in the above experiment, cost Rs 3,000. This is an alternative method of providing durable tracks in places where ruts are formed.

(5) One furlong of light cement concrete surface reinforced with rabit netting, Rs 3,000.This is proposed as a result of discussions at the last Indian Roads Congress when the opinion appeared to be that for the general use of cement concrete on roads outside towns and heavy industrial areas a very much lighter section of concrete than has previously been used would have to be tried.

(6) One mile of granite slab trackways surface painted on a gravelled road, cost Rs 9,000.This is in continuation of other experiments with stone and cement trackways in unmetalled roads as being ultimately a cheaper method of developing feeder roads than metalling. Track-ways of this nature have been laid near Delhi,in Assam, and in the Punjab in earth roads and this experiment and demonstration is similar except that gravel being available the rest of the road will be of a more durable character

2. I am to request that the Hon'ble the Resident may kindly be moved to use his good offices with the Government of India to allot a sum of Rs 35,000 to this State at a very early date so as to enable these experimental works to be carried out before the Indian Roads Congress meets in Bangalore in December 1935.

3. I am to add that these proposals have been made in personal consultation with Mr. K.G.Mitchell, C.I.E., Consulting Engineer to the Government of India,(Roads), when he visited Bangalore recently.)

I have the honour to be,
Sir,
Your most obedient servant,

17/7/35.

Secretary to Government,
Public Works Department.

TRNSN/17.7

S.N. 2 3

All communications should be addressed to the Secretary to the Government of India, Department of Industries and Labour, Public Works Branch, by title, NOT by name.

Telegrams : "WORKS".

GOVERNMENT OF INDIA.

Department of Industries and Labour.

PUBLIC WORKS BRANCH.

No.C29.

Dated Simla, the 27th July 1935.

From

E.M. Jenkins, Esquire, I.C.S.,
Offg. Joint Secretary to the Government of India,

OFFICE OF THE RESIDENT IN MYSORE.
BANGALORE.
31 JULY 1935
Regd. No. 7333.
File. No. 100/35

To Hon'ble the Resident at Mysore.

Road Experiments in surface painting.

Sir,

I am directed to say that in connection with the ensuing session of the Indian Roads Congress to be held at Bangalore in December 1935 it is considered desirable to test and demonstrate certain specifications regarding surface painting of roads in Southern India. The Government of India are therefore pleased to sanction a grant not exceeding Rs.35,000 (thirty five thousand) from the reserve in the Road Account to the Mysore Darbar for the following experimental lengths recently discussed by the Consulting Engineer to the Government of India (Roads) with the Chief Engineer, Mysore.

	Rough estimated cost. Rs.
(1) One mile of ordinary tar painting on water bound macadam.	2,900
(2) Half a mile of laterite road treated with a light coat of granite metal rolled into the laterite and painted with tar.	3,960
(3) One mile of granite trackways laid in water bound road and surface painted with bitumen.	14,000
(4) Quarter mile of premixed bituminous macadam trackways in water bound macadam. The whole surface to be painted as in (3) above.	2,000
(5) One furlong of light cement concrete surface reinforced with rabit netting.	3,000

	Rough estimated cost. Rs.
(6) One mile of granite slab trackways surface painted on a gravelled road.	8,000.

2. The grant is subject to the general conditions attached to grants from the reserve in the Road Account as detailed in this Department's letter No. C29, dated the 26th January 1933.

3. It is understood that a short article on the results of the experiments will be furnished to this Department in due course for publication, in "Indian Roads" or otherwise.

I have the honour to be,
Sir,
Your most obedient servant,

K. G. Mitchell

Consulting Engineer to the Government of India(Roads)
for Offg. Joint Secretary to the Government of India.

D.A.- Nil.

RR
MLa

S. N. 3

Print 1718 Issued 21.8.35

DEPARTMENT.

BRANCH.

File No.

Serial No.

Draft Letter ~~Memorandum~~ ~~Telegram~~

Class for telegrams

Ordinary | Express | Urgent* | Priority | Clear Line†

*Only for Foreign Telegrams.

†Not for Foreign Telegrams.

No. F.1001/35 Dated 21st August 1935

To be issued on

Issued on

1st Reminder

2nd Reminder

3rd Reminder

Heading :

Case or Diary No.

If post copy of telegram required

Date of despatch of above

List of enclosures

(Code word for telegrams.)

× S.N.1 ante

P.U.C.

To

The Secretary to the Govt. of Mysore, Public Works Deptt.

Subject:- Road Experiments in Surface Painting.

Sir,

I am directed to refer to your letter No. 162/S, dated the 19th July 1935, and ~~this~~ to say with reference to the specifications for the surface painting of roads referred to therein for purposes of test and demonstrations in connection with the ensuing Road Congress of 1935, the Govt. of India have been pleased to sanction a grant not exceeding Rs. 35,000/-(thirty five thousand) from the Reserve in the Road Account to the Govt. of Mysore for the following experimental lengths recently discussed by the Consulting Engineer to the Govt. of India(Roads) with the Chief Engineer Mysore :

† S.N.2 ante

P.U.C.

Item	Rough estimate Cost
	Rs.
(1) One mile of ordinary tar painting on water bound ~~macadam~~ macadam.	2,900
(2) Half a mile of laterite road treated with a light coat of granite metal rolled into the laterite and painted with tar.	3,960

S.N.2 ante

P.U.C.

S. S.

MGIPC—S1—158(Genl)MFP—(M-1932)—3-5-34—50,000 Pads.

Item	Rough estimated cost Rs.
(3) One mile of granite trackways laid in water bound road and surface painted with bitumen.	14,000
(4) Quarter mile of premixed bituminous macadam trackways in water bound macadam. The whole surface to be painted as in (3)	2,000
(5) One furlong of light cement concrete surface reinforced with rabit netting	3,000
(6) One mile of granite slab trackways surface painted on a gravelled road.	8,000

2. The grant is subject to the general conditions attached to grants from the Reserve in the Road Account as detailed in ~~the~~ letter from the Govt. of India, Deptt. of Industries and Labour, No. C.29, dated the 26th Jan. 1933, forwarded with letter from this Residency No. 3188, dated the 25th April 1933.

3. It is understood that a short article on the results of the experiments will be furnished to the Govt. of India in due course for publication in ~~the~~ " Indian Roads" or otherwise.

I have etc.,

Secretary

S.N.1 (S)

a copy which was

S.N.2 (S)

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S. N. 4.

Draft I issued KRN 21.8.35

DEPARTMENT.

BRANCH.

File No.

Serial No.

Draft ~~Letter / Memorandum / Telegram~~

Class for telegrams

Ordinary / Express / Urgent* / Priority / Clear Line†

*Only for Foreign Telegrams.

†Not for Foreign Telegrams.

No. F.1001/35 Dated 21/8/ August 19 35

To

The Secretary to the Govt. of India, Deptt. of Industries and Labour, Public Works Branch.

Subject:- Road Experiments in Surface Painting.

Sir,

I have the honour to refer to letter from the Govt. of India in the Deptt. of Industries and Labour, Public Works Branch, No. C.29, dated the 27th July 1935, sanctioning a grant not exceeding Rs. 35,000/- from the Reserve in the Road Account to the Govt. of Mysore for certain experiments in the treatment of road surface. The Govt. of Mysore intend ~~propose~~ to try the experiments on the Bangalore - Mysore road. Short notes on each of the items and detailed estimates furnished by the Govt. of Mysore are enclosed.

I have etc.,

12/8.

For Resident.

To be issued on

1st Reminder

2nd Reminder

3rd Reminder

Heading :

Case or Diary No.

If post copy of telegram required

Date of despatch of above

List of enclosures

(Code word for telegrams)

+ S.N 2 ante pvc 1

§ Items (1) - (6) of S.N 1 pvc 1

pp (E) ante

Issued on

MGIPC—S1—158(Genl)MFP—(M-1033)—3-5-34—50,000 Pads.

EXPERIMENTS ON VARIOUS METHODS OF ROAD CONSTRUCTION AND MAINTENANCE.

--:0:--

(1) One mile of ordinary tar painting on water bound macadam, estimated cost Rs.2,000. Tar painting has really passed beyond the experimental stage particularly in the Punjab, but has not been tried out in Southern India to anything like the same extent and is very little known. Tar is, of course, manufactured in India and its use should be encouraged. This will form a useful demonstration for Southern India.

(2) Half a mile of laterite road treated with a light coat of granite metal rolled into the laterite and painted with tar, estimated cost Rs.4,000. This is a specification which may be tried in Southern India and in the Deccan where there is an extensive mileage of laterite roads.

(3) One mile of granite trackways laid in water bound road and surface painted with bitumen, estimated cost Rs.14,000. This is expensive but will probably be very durable. Some small scale experiments already carried out tend to show that on a metalled road the addition of trackways made of local granite slab about 18 inches to 2 ft. wide and surface painted with bitumen, laid in the tracks where the bullock cart naturally cuts ruts, will carry both the bullock cart and motor traffic without appreciable wear. This has been tried on an approach road to Bangalore on a small scale where bullock cart traffic is heavy and it now desired to try it on a larger scale on the main road.

(4) Quarter mile of premixed bituminous macadam trackways in water bound macadam. The whole surface is to be painted as in the above experiment, cost Rs.3,000/-. This is an alternative method of providing durable tracks in places where ruts are formed.

(5) One furlong of light cement concrete surface reinforced with rabit netting, Rs.3,000. This is proposed as a result of discussions at the last Indian Roads Congress when the opinion appeared to be that for the general use of cement concrete on roads outside towns and heavy industrial areas a very much lighter section of concrete than has previously been used would have to be tried.

(6)

(6) One mile of granite slab trackways surface painted on a gravelled road, cost Rs.9,000. This is in continuation of other experiments with stone and cement trackways in unmetalled roads as being ultimately a cheaper method of developing feeder roads than metalling. Track-ways of this nature have been laid near Delhi, in Assam, and in the Punjab in earth roads and this experiment and demonstration is similar except that gravel being available the rest of the road will be of a more durable character.

---:0:---

"C O P Y"

SUPERINTENDENT, RESIDENT'S OFFICE.

BJ

S.N.S

All communications should be addressed to the Secretary to the Government of India, Department of Industries and Labour, Public Works Branch, by title, NOT by name.

Telegrams :
" WORKS ".

GOVERNMENT OF INDIA.

Department of Industries and Labour.

PUBLIC WORKS BRANCH.

No. C29

Dated Simla, the 24th September 1935.

From

E. M. Jenkins, Esq., I.C.S.,

Offg. Joint Secretary to the Government of India,

OFFICE OF THE RESIDENT IN MYSORE
BANGALORE.
28 SEPT. 1935
Regd. No. 9372
File. No.

To

The Hon'ble the Resident in Mysore,

Bangalore.

Road experiments in surface painting.

Sir,

I am directed to acknowledge the receipt of your letter, No. F.1001/35 R.O. I, dated the 21st August 1935, forwarding detailed estimates and notes relating to certain experiments in surface painting on the Bangalore-Mysore road and to say that it is presumed that the works have been put in hand.

I have the honour to be,

Sir,

Your most obedient servant,

L. G. Mitchell

Consulting Engineer to the Government of India (Roads),
for Offg. Joint Secretary to the Government of India.

D.A.- Nil.

IA 24/9/35

S. N. 6

All communications should be addressed to the Secretary to the Government of India, Department of Industries and Labour, Public Works Branch, by title, NOT by name.
Telegrams: "Roadind" "~~WORKS~~".

GOVERNMENT OF INDIA.

Department of Industries and Labour.

PUBLIC WORKS BRANCH.

No.C29.

Dated Simla, the 2nd October, 1935.

From

K.G. Mitchell, Esquire, C.I.E.,
Consulting Engineer to the Government of India, (Roads)

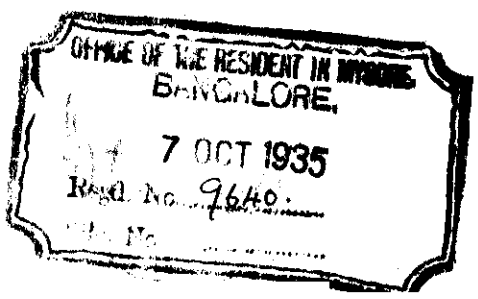
To

The Chief Engineer of Mysore,
Mysore Public Works Department, Bangalore.

Subject:- Road experiments on the Mysore-Bangalore road.

Sir,

With reference to your letter, No.-2690, dated the 23rd September 1935, I have the honour to say that I agree to the slight modification proposed by you in the experiment in question.



I have the honour to be,
Sir,
Your most obedient servant,

K.G. Mitchell.

Consulting Engineer to the Government of India, (Roads).

D.A-Nil.

Copy, with a copy of the letter replied to, forwarded to the Honourable the Resident in Mysore, with reference to the Government of India letter No.C29, dated the 27th July, 1935.

By order, etc.,

Offg. Assistant Secretary to the Government of India.

D.R.K.
1-10-35.

Copy of letter No.2690, dated the 23rd September, 1935, from the Chief Engineer of Mysore, Bangalore, to the Consulting Engineer to the Government of India, (Roads).

Subject:- Experimental works to be carried out on the Bangalore-Mysore Road out of the grant of Rs.35,000/- given from the Government of India Central Road Fund.

I have the honour to inform you that one of the experimental works proposed is to construct two furlongs of Shellmacadam trackways with surface painting on top with Bitumen for a width of 15 ft and a sum of Rs.2,000/- has been provided for this purpose, Mr.I.A.T. Shannon of the Burmah Shell Co., Ltd., Madras, who had seen me in this connection suggests, that a light premix laid for a thickness of 1½" and to a width of 12 feet, would be a very economical specification for the traffic conditions on the Bangalore-Mysore Road. Light premixes of this nature are said to have been laid with great success in Secunderabad and elsewhere. The cost per furlong for this treatment as per the Company's estimate will be about Rs.1,050/-

2. I therefore, propose that instead of two furlongs of Shellmacadam trackways as originally proposed, one furlong of Shellmacadam trackways and one furlong of premix 12 feet wide may be carried out. This will not materially alter the estimate provision and I hope you will have no objection to this slight alteration.

True Copy.

M Ramaiah

For Superintendent,

Department of Industries and Labour.

D.R.K.
1-10-35.

S.N.7.

Issued Dec 1935
NR 5/11

DEPARTMENT.

BRANCH.

File No.

Serial No.

Draft ~~Memorandum~~ Letter / Telegram

Ordinary
Express
Urgent*
Priority
Clear Line†

*Only for Foreign Telegrams.

†Not for Foreign Telegrams.

Class for telegrams

No. F.1001/35 Dated 5-11 Nov. 1935

To be issued on

Issued on

1st Reminder

2nd Reminder

3rd Reminder

Heading :

Case or Diary No.

If post copy of telegram required

Date of despatch of above

List of enclosures

(Code word for telegrams.)

To

The Secretary to the Govt. of Mysore. Public Works Deptt.

Subject:- Road Experiments in Surface Painting.

Sir,

With reference to the correspondence ending with my letter, No. F. 1001/35, dated the 21st August 1935, I am directed to say that the Govt. of India presume that the works have been put in hand and that they are now in progress. I am to request you kindly to confirm the presumption at an early date and to inform this Residency what progress has been made ~~with the works~~ so far if there is no objection .

I have etc.,

For Secretary

S. 6.

[MG1PC—S1—158(Gen1)MFP—(M-1983)—3-5-34—50,000 Pads.

S. N. 9.

No. 1808/S
Encls :

PUBLIC WORKS SECRETARIAT,

Dated Bangalore, 31-12-1935

FROM

DIWAN BAHADUR
N. N. AYYANGAR, B.A., L.C.E., M.I.E. (Ind.), I.S.E.,
Secretary to Government,
Public Works Department,
Bangalore.

OFFICE OF THE RESIDENT IN MYSORE.
BANGALORE.
3 JAN. 1936
Regd. 24
To

The Secretary to the Hon'ble the Resident in Mysore,
Bangalore.

SIR,

Road experiments in surface painting.

With reference to your letter No.F.1001-35/R.O.I dated the 5th November 1935, requesting to be informed of the progress made with the experiments on various methods of road construction and maintenance for which a grant of Rs.35,000/- has been sanctioned by the Government of India from the Reserve in the Road Account, I am directed to inform you that progress, as indicated below, has so far been made on the several experimental works:-

I. Experimental Works on Madras-Cannanore Road (Kengeri side).

(1) Shalimar tar painting.- The road surface is kept ready and necessary materials also collected. The work has been started and is in good progress. The small remaining portion will soon be - - - completed.

(2) Shell Sheet (1½") 12' wide.- This has been completed.

(3) Shellmac tracks.- The work has been completed except for - - - Spramex painting on top.

(4) Slab tracks.- Half a mile of tracks completed except for ---- Spramex painting on top. For 2 furlongs, one side track has been completed.

(5) Cement concrete road.- Materials are ready and work has just been started. It will be completed in the course of the next few days.

(b)

II. Laying track slabs on Maddur Deviation Road.-

3,000 running feet of slabs have been laid. Slabs have been collected for some length and dressed and further collection is ---- going on. (The work will be completed before the end of December 1935) ( ) omit in type.

(2. All the works are in brisk progress and are expected to be -- completed very early.)

I have the honour to be,

Sir,

Your most obedient servant,

Secretary to Government,
Public Works Department.

T.R.S.

Issued
24
17.1.36

S.N. 10

No.F.1001-35.
R.O.I.

From

The Hon'ble Mr. L.G.L. Evans, C.I.E., I.C.S.,

Resident in Mysore.

To

The Secretary to the Government of India,
Department of Industries and Labour,
Public Works Branch.

Dated Bangalore, the 17th January 1936.

ROAD EXPERIMENTS IN SURFACE PAINTING.

Sir,

S.N.5
Cir. 10
(1)

I have the honour to refer to Mr. Jenkins' letter No.C.29, dated the 24th September 1935, and to say that the Government of Mysore report that progress as indicated below had been made on the several experimental works up to the 31st December 1935.

I. Experimental Works on Madras-Cannanore Road (Kengeri side)

(1) Shalimar tar painting. - The road surface is kept ready and necessary materials also collected. The work has been started and is in good progress. The small remaining portion will soon be completed.

(2) Shell Sheet (1½") 12' wide. - This has been completed.

(3) Shellmac tracks. - The work has been completed except for Spramex painting on top.

(4) Slab tracks. - Half a mile of tracks completed except for Spramex painting on top. For 2 furlongs, one side track has been completed.

(5) Cement concrete road. - Materials are ready and work

has just been started. It will be completed in the course of the next few days.

II. Laying track slabs on Maddur Deviation Road. -

3,000 running feet of slabs have been laid. Slabs have been collected for some length and dressed and further collection is going on.

I have the honour to be,
Sir,
Your most obedient servant,

for R E S I D E N T.

AR.